

## Anthracnose Disease Management

Anthracnose (*Colletotrichum graminicola*) has become a major disease on UK and Irish turf over recent years and is most severe on plants under stress from:

- Compaction
- Excessive heat or drought resulting in dry patch
- Low fertility
- Poor surface drainage
- High surface fibre levels



In the 1980's, Anthracnose was a disease characteristic of late autumn and winter, when persistent moisture favoured the development of basal rot on the base of Annual Meadowgrass (*Poa annua*) plants, its preferred host species. However from the mid to late 90's, it has become more of an issue as a disease of the summer months. There are many suggested theories for this change in activity, but what is certain is that a clear correlation exists between increased summer stress and incidence of Anthracnose.

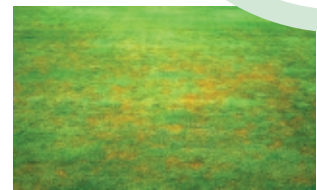
Summer stress is brought about by the typical practices adopted in the summer months on golf greens, i.e. low cutting heights, occasional rolling for key tournaments / events and frequent top-dressing. The latter plays an important role in the development of the disease, because the action of abrasive sand particles on the base of the *Poa annua* plant provides entry sites for the fungus.

The two forms of the disease, foliar blight and basal rot may act in sequence or independently from one another. The disease can affect *Poa annua*, creeping bentgrass, bent / fescue mixtures and perennial rye grass, however *Poa annua* is the most susceptible.

Basal rot is most commonly seen in the UK and Ireland, and whilst bentgrass may recover from this, *Poa annua* is nearly always killed once the rot has entered the crown.

### Prevention is better than cure

This last point is fundamental to the understanding of Anthracnose management. Only a preventative strategy can be 100% effective to control the disease and therefore once you see widespread symptoms, you will only achieve containment, rather than cure.



To help in the management of anthracnose, the following good cultural practices should be adopted.

- Reduce surface compaction to aid moisture movement in soils
- Provide adequate, but not excessive nutrition
- Avoid aeration / topdressing during periods of stress
- Manage surface fibre levels to ensure moisture is not held in the surface
- Avoid the development of dry patch, by using wetting agents and hand-watering



### Chemical control of Anthracnose

It cannot be overstated that by the time you see Anthracnose, the damage to turf grass has been done, and therefore it is important to act preventatively to stop the rot entering the crown of the plant.

This means undertaking a disease management strategy, rather than just applying a fungicide when the disease is observed.

Headland Amenity is recommending a broad-spectrum tank mix of fungicides to prevent Anthracnose and is based on the latest best practice from both UK and USA experience.

### Timing

To achieve effective control, it is therefore important to look back at when Anthracnose normally becomes an issue in the golfing calendar and adopt a preventative strategy 3 weeks before this time period. Experience over the last few years has shown that Anthracnose is most active during the months of August and September and therefore a preventative chemical strategy should be orientated around these months.

For both basal and foliar Anthracnose disease control at historic times of disease pressure; apply twice at monthly intervals, with the first application made at least 3 weeks prior to normal time of disease outbreak using the following **systemic and contact tank mix**.

Product	Rate per hectare	Spray volume per hectare	Rate per 500m <sup>2</sup>	Spray volume per 500m <sup>2</sup>
<b>Headland Snare</b>	20 litres per hectare	550 – 1100 litres	1 litre	55–110 litres
<b>500gm/ litre Chlorothalonil - containing fungicides</b>	15 litres per hectare	550 – 1100 litres	0.75 litre	55–110 litres

For curative applications – **the disease must be controlled at the earliest stage**, applying the above tank mixture and continue at monthly intervals as needed.

### Application information

- When tank-mixing Headland Snare with chlorothalonil-containing products, always add Headland Snare to the spray tank first.
- Apply after mowing or avoid mowing for 24 hours after application.
- **Do Not** irrigate immediately after application as Chlorothalonil-containing products need to dry on the leaf to be effective (**important read next paragraph**)
- As Headland Snare is an upwardly moving systemic fungicide, it is important to irrigate/syringe lightly (2.5mm – 6mm / 8 – 12 hours after application) to allow control of root and crown diseases such as Anthracnose. Take care not to move chemical below root zone of turf in treatment areas.
- The above rate of Headland Snare will also control earthworms, thus avoiding the use of an additional chemical for this purpose and thereby reducing overall spray costs.



Whilst Anthracnose is not on the UK approved label for Snare, the identity of the target disease is not part of the statutory conditions of use of a product and therefore there is no reason why an approved product for turf diseases cannot be used against a disease which is not claimed on the label providing all the statutory conditions are complied with. Headland Snare contains Thiophanate methyl.

MAPP no: 11873  
**READ THE LABEL BEFORE YOU BUY:  
 USE PESTICIDES SAFELY**

Headland Amenity wish to thank Kate Entwistle of the Turfgrass Disease Centre – 01256 880246, for the use of the Anthracnose images on the first page.



### Headland Amenity Limited

1010 Cambourne Business Park, Cambourne,  
 Cambridgeshire United Kingdom CB3 6DP  
 Telephone: 01223 597834 Fax: 01223 598052  
 E-mail: info@headlandamenity.com Web: www.headlandamenity.com